Complete Summary

GUIDELINE TITLE

Evidence-based protocol. Wandering.

BIBLIOGRAPHIC SOURCE(S)

Futrell M, Melillo KD. Evidence-based protocol. Wandering. Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Dissemination Core; 2002 Mar. 45 p. [63 references]

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Wandering

GUIDELINE CATEGORY

Management
Risk Assessment

CLINICAL SPECIALTY

Geriatrics
Nursing

INTENDED USERS

Advanced Practice Nurses
Health Care Providers
Nurses

GUIDELINE OBJECTIVE(S)

To assist formal caregivers of older adults with dementia who wander, with a guideline for dealing with problem wandering behavior

TARGET POPULATION

Older adults with dementia who wander

INTERVENTIONS AND PRACTICES CONSIDERED

Assessment

1. Assessment of such factors as cognitive and neurocognitive deficits; types, patterns, and impact of wandering; depressive symptomatology, anxiety and agitation; environmental strategies being used by formal and/or informal caregivers in dealing with problem wandering
2. Assessment tools
    - Mini-Mental State Examination (MMSE)
    - Algase Wandering Scale (AWS)
    - Short Geriatric Depression Scale (SGDS)
    - Cohen-Mansfield Agitation Inventory: Long Form with Expanded Descriptions of Behaviors
    - Memory and Behavior Problems Checklist--1990R (MBPC)

Management

1. Environmental modifications
2. Use of technology and safety devices to locate and monitor wandering
3. Physical/psychosocial interventions
4. Caregiving support and education

MAJOR OUTCOMES CONSIDERED

- Risk for wandering behavior
- Outcomes of strategies to manage wandering

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

MEDLINE; CINAHL; PsychINFO; AGELINE; CHID & ADEAR/NIH bibliographic search

NUMBER OF SOURCE DOCUMENTS

404

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

The evidence in this protocol is based upon research studies that included older adult populations. The grading scheme used to make recommendations is as follows:

A. Evidence from well-designed meta-analysis.
B. Evidence from well-designed controlled trials, both randomized and nonrandomized, with results that consistently support a specific action (e.g. assessment, intervention or treatment).
C. Evidence from observational studies (e.g. correlational descriptive studies) or controlled trials with inconsistent results.
D. Evidence from expert opinion or multiple case reports.

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The guideline was reviewed by Series Editor, Marita G. Titler, PhD, RN, FAAN; and content experts, Donna L. Algase, PhD, RN, FAAN, FGSA, and Sherry McKay, MSN, ARNP, GNP.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The grades of evidence (A-D) are defined at the end of the Major Recommendations.

Refer to the original guideline document for a definition of key terms (i.e., dementia, Alzheimer´s disease, and wandering), a description of individuals/patients at risk for wandering (i.e., defining characteristics and related factors), and a list of assessment tools and instruments.

Assessment Criteria

The following assessment criteria indicate patients who are likely to benefit the most from use of this evidence-based protocol:

- Assess for cognitive decline using the Mini-Mental State Examination (MMSE) (Folstein M, Folstein S, & McHugh, 1975). (See Appendix A.1 in the original guideline document).
- Assess for neurocognitive deficits and wandering patterns using the Algase Wandering Scale (AWS) (Algase et al., 2001). The Algase Wandering Scale is developed to quantify wandering in several domains as reported by caregivers. It does not measure wandering directly, but can be a useful adjunct tool for clinical assessment purposes (See Appendix A.2 in the original guideline document).
- Assess for depressive symptomatology with Short Geriatric Depression Scale (SGDS) (See Appendix A.3 in the original guideline document) (Sheikh & Yesavage, 1986). Wandering can develop more in depressed Alzheimer´s disease patients (Lyketos et al., 1997).
- Assess for anxiety and agitation. In assessing these symptoms, it is critical to conduct a careful evaluation for a general medical, psychiatric, or psychosocial problem that may underlie the disturbance (American Psychiatric Association, 1997). The Cohen-Mansfield Agitation Inventory: Long Form with Expanded Descriptions of Behaviors (Cohen-Mansfield, 1999; Cohen-Mansfield, Marx, & Rosenthal, 1989) (See Appendix A.4 in the original guideline document) is useful in doing this assessment.
- Assess the frequency with which memory and behavior problems occur including wandering and to what degree the behavior upsets the caregiver. The Memory and Behavior Problems Checklist—1990R (MBPC) (See Appendix A.5 in the original guideline document) is useful for this assessment.
- Assess for such factors associated with wandering as lack of activity, cognitive impairment, and greater impairment in activities of daily living (ADL) functioning (Logsdon, et al., 1998).
- Assess what environmental strategies are currently used by formal and/or informal caregivers in dealing with problem wandering (i.e., latches and

alarms on doors, barring or disguising exits, visual cues such as Stop signs, constant personal supervision, and/or restriction of caregiver´s own activities due to concerns about care recipient´s wandering in other settings such as shopping malls or community outings) and evaluate their effectiveness.

- Assess wandering patterns, which may help to determine treatment.
    1. Identify the consequences of wandering such as staff attention, access to items (e.g., food and sweets), and sensory stimulation, which may then be applied when not wandering, thus reducing the impetus to wander (Heard & Watson, 1999).
    2. Identify the travel patterns of patients who wander such as:
        a. Direct travel – travel from one location to another without diversion
        b. Random travel – roundabout or haphazard travel to many locations within an area without repetition; no obvious route to stopping point
        c. Pacing – repetitive back and forth movement within a limited area
        d. Lapping – repetitive travel characterized by circling large areas (Algase et al., 2001; Martino-Saltzman et al., 1991).

        Direct travel is most efficient; other methods (2b-2d) are inefficient. Travel inefficiency is inversely related to cognitive status. Severely demented patients travel inefficiently throughout the day. Less cognitively impaired patients travel more inefficiently near end of day, perhaps due to fatigue effects.

    3. Types of wandering behavior may include:
        a. Overtly goal directed/searching behavior – searching for something often unattainable, often associated with calling out repeatedly or approaching others in pursuit of a goal.
        b. Overtly goal directed/industrious behavior – inexhaustible drive to do things or remain busy, often commenting on need to perform a stated task or gesturing as if performing work.
        c. Apparently non-goal directed behavior – aimlessly drawn to one stimulus after another (Snyder et al., 1978).
- Assess pre-morbid lifestyle to help identify those likely to wander.
    1. An active interest, physically and mentally, in music. Examples include singing, playing an instrument, and having a recognized love of music (Thomas, 1999).
    2. Demonstrating extroverted personality characteristics of warmth, gregariousness, activity, and positive emotion; demonstrating altruism. Examples may include being more continually active in daily activities, demonstrating social-seeking behavior, demonstrating a greater positive regard toward oneself and others (Thomas, 1997).
    3.
        a. Having been physically active in social and leisure activities.
        b. Having experienced a number of stressful events throughout a lifetime, necessitating readjustments.
        c. Responding to stress with psychomotor activity, rather than emotional reactions.
        d. Having demonstrated more motoric behavioral styles in earlier years (Monsour & Robb, 1982).

- A descriptive typology of wandering in dementia (Hope & Fairburn, 1990) is also helpful in determining individuals who may benefit from this protocol. This typology is listed in Table 1 in the original guideline document.

Environmental Modifications

1. Provide a secure place to wander such as a wanderer's lounge, or a large, safe walking area (Allen-Burge, Stevens, & Burgio, 1999; APA, 1997; McGrowder-Lin & Bhatt, 1988). (Evidence Grade = C).
2. Enhance the environment by increasing visual appeal, such as tactile boards or three dimensional wall art (Allen-Burge, Stevens, & Burgio, 1999; Cohen-Mansfield & Werner, 1998; Dickinson & McLain-Kark, 1998) (Evidence Grade = C).
3. Place gridlines in front of doors to decrease exit seeking (Forbes, 1998; Hussian & Brown, 1987) (Evidence Grade = A).
4. Make exits less accessible by covering panic bar with cloth and allow walking where doors are not in the path, safety locks, complex and less accessible door latches (APA, 1997; Dickinson & McLain-Kark, 1998) (Evidence Grade = C).
5. Maintain safety by removing clutter, disabling appliances and utilizing safety locks (Gitlin & Corcoran, 1996) (Evidence Grade = D).
6. Provide stimulation clues such as pictures and signs (Allen-Burge, Stevens, & Burgio, 1999; Gitlin & Corcoran, 1996) (Evidence Grade = D).
7. Use a combination of large-print signs and portrait-like photographs to aid in way finding (Namazi, Rosner, & Rechlin, 1991; Nolan, Mathews, & Harrison, 2001) (Evidence Grade = C).
8. Use a multifaceted approach to environmental modifications, as it is more effective than singular modifications (Bair et al., 1999; Dickinson & McLain-Kark, 1998) (Evidence Grade = C).

Technology & Safety

1. Use technological devices to locate and monitor wandering (Algase et al., 1997; Cohen-Mansfield et al., 1997) (Evidence Grade = B).
2. Use a verbal alarm system as it is more effective than an aversive alarm system (Connell & Sanford, 1998) (Evidence Grade = C).
3. Use mobile locator devices for quickly locating wanderers (Altus et al., 2000; McShane, et al., 1998; Melillo & Futrell, 1998) (Evidence Grade = C).
4. See Appendix B in the original guideline document for specific information on the Low Cost Patient Locator System for Geriatric Wandering (Melillo & Futrell, 1999).

Physical/Psychosocial Interventions

1. Assess for and treat depression (Lyketsos, et al., 1997) (Evidence Grade = B).
2. Decrease wandering during structured activities by using social interaction of staff and/or visitors or music (Cohen-Mansfield & Werner, 1995; Holmberg, 1997a; Matteson & Linton, 1996) (Evidence Grade = B).
3. Music sessions are more effective than reading sessions in decreasing wandering behavior (Bright, 1986; Fitzgerald-Cloutier, 1993; Groene, 1993) (Evidence Grade = B).

4. Prevent risky situations by adequate supervision (APA, 1997; Aspinall, 1994) (Evidence Grade = D).
5. Walking should not be unnecessarily limited (APA, 1997; Brungardt, 1994) (Evidence Grade = D).
6. Decrease wandering by eliminating stressors from the environment such as, cold at night, changes in daily routines, and extra people at holidays (Hall & Laloudakis, 1999) (Evidence Grade = D).
7. Decrease wandering by providing regular exercise (Holmberg, 1997; Holmberg, 1997) (Evidence Grade = B).

Caregiving Support & Education

1. Educate caregivers to assist in their ability to care for the wanderer (Cohen-Mansfield et al., 1997; Dodds, 1994) (Evidence Grade = C).
2. A facility-based approach could include: identification of the problem, a wandering prevention program, interactions with staff, and staff mobilization around problem (Heard & Watson, 1999; Rader, 1987) (Evidence Grade = C).

Definitions:

Evidence Grading

A. Evidence from well-designed meta-analysis.
B. Evidence from well-designed controlled trials, both randomized and nonrandomized, with results that consistently support a specific action (e.g., assessment, intervention or treatment).
C. Evidence from observational studies (e.g., correlational, descriptive studies) or controlled trials with inconsistent results.
D. Evidence from expert opinion or multiple case reports.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

References open in a new window

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each management recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Use of this guideline can help formal caregivers of older adults with dementia who wander in dealing with problem wandering behavior.

Subgroups Most Likely to Benefit:

Individuals at risk for wandering behavior include community-residing or institutionalized older adults with dementia.

POTENTIAL HARMS

Not applicable

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- This evidence-based practice protocol is a general guideline. Patient care continues to require individualization based on patient needs and requests.
- An extensive review of the literature on wandering identifies little consistency within and across disciplines about effective interventions to manage wandering. One researcher states, "intervention studies for wandering are generally weak, suffering conceptually from imprecise thinking about goals of intervention and appropriateness of the theory (if any) behind it". Furthermore, she states, "the impact of wandering on weight and nutritional status has not been studied, although a potential connection is logical".
- This protocol groups studies into four categories. No firm conclusions can be drawn with respect to the efficacy of any single intervention strategy, but a wide variety of approaches such as music therapy, social intervention, environmental modifications, and environmental and technical devices can be used alone or in combination. Intervention studies that take into consideration a multi-factorial approach to wandering are sorely needed.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

In order to evaluate the use of this protocol among patients at risk for wandering both process and outcome factors should be evaluated.

Process Indicators

Process indicators are those interpersonal and environmental factors that can facilitate the use of a protocol. Process factors relate to staff/caregiver knowledge and confidence in using this protocol.

One process factor that can be assessed is knowledge of staff/caregivers about wandering. The Wandering Knowledge Assessment Test (see Appendix C in the original guideline) should be assessed before and following the education of staff/caregivers regarding use of this protocol.

The same sample of staff/caregivers for whom the Knowledge Assessment test was given should also be given the Process Evaluation Monitor (see Appendix D in the original guideline) approximately one month following use of the protocol. The purpose of this monitor is to evaluate perceived understanding and support of each individual using the protocol.

Outcome Indicators

Outcome indicators are those expected to change or improve from consistent use of the protocol. The major outcome indicators that should be monitored over time are:

- Problem wandering should decrease
- Safety of the individual should increase
- Increase in way finding; reduced disorientation

The Wandering Quality Management Monitor described in Appendix E of the original guideline is to be used for monitoring and evaluating the usefulness of the wandering protocol in improving outcomes of patients who wander. The guideline developer notes that this outcome monitor can be adapted to an organization or unit and further notes that other outcomes believed to be important can be added.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Living with Illness
Staying Healthy

IOM DOMAIN

Effectiveness
Safety

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Futrell M, Melillo KD. Evidence-based protocol. Wandering. Iowa City (IA): University of Iowa Gerontological Nursing Interventions Research Center, Research Dissemination Core; 2002 Mar. 45 p. [63 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2002 Mar

GUIDELINE DEVELOPER(S)

University of Iowa Gerontological Nursing Interventions Research Center, Research Dissemination Core - Academic Institution

SOURCE(S) OF FUNDING

This guideline was developed with the support provided by Grant #P30 NRO3979, National Institute of Nursing Research (NINR), National Institutes of Health (NIH).

GUIDELINE COMMITTEE

University of Iowa Gerontological Nursing Interventions Research Center Research Dissemination Core

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Author(s): May Futrell, PhD, RN, FAAN; Karen Devereaux Melillo, PhD, RN, CS, FAANP

Series Editor: Marita G. Titler, PhD, RN, FAAN

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

An update is not in progress at this time.

GUIDELINE AVAILABILITY

Electronic copies: Not available at this time.

Print copies: Available from the University of Iowa Gerontological Nursing Interventions Research Center, Research Dissemination Core, 4118 Westlawn, Iowa City, IA 52242. For more information, please see the University of Iowa Gerontological Nursing Interventions Research Center Web site.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on October 4, 2002. The information was verified by the guideline developer on October 29, 2002.

COPYRIGHT STATEMENT

Date Modified: 11/8/2004